

Please substitute the attached clean copy of the amended claims 1, 6, and 8 for the pending claims 1, 6, and 8. A marked-up version of the claims with all the changes shown is attached also.

REMARKS

Claims 1 through 4 and 6 through 17 are in the application; claim 5 has been canceled.

Reconsideration and withdrawal of the objection to the drawings because the description does not contain reference numeral "26" is respectfully requested. The examiner suggested correctly that reference numeral "29" on page 11 should read "26". The specification has been corrected accordingly.

Reconsideration and withdrawal of the objection to the specification is respectfully requested. The wording suggested by the examiner has been introduced on page 10.

Reconsideration and withdrawal of the objection to the claims 1-17 is respectfully requested. Claim 1 has been amended

by dividing the claim into a preamble and a characterizing portion and by introducing a transitional phrase. Also, the elements have been separated by line indentations.

Reconsideration and withdrawal of the rejection of claims 1-5, 8-12, 15-17 under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. in view of Koren (EP 0 663 363) is respectfully requested.

Claim 1 has been amended by incorporating therein the subject matter of claim 5 and by defining the rubber-elastic body as a unitary body which yields radially but not axially.

The transport disc according to the invention has at least one outer elastic support, wherein the outer elastic support is configured to cooperate with a securing disc of a second opening drum of the opening device to clamp an individual printed sheet between the outer elastic support and the securing disc for transporting the individual printed sheet to a transport device. The outer elastic support is a unitary rubber-elastic segment body extending in a circumferential direction of the transport disc. The unitary rubber-elastic segment body has an outer

bearing layer and a compensation area positioned radially inwardly underneath the outer bearing layer; the compensation area is radially but not axially yielding and supports the outer bearing layer.

As is disclosed in the specification on page 12, last paragraph, and as is clearly illustrated in the drawings (see Figs. 2 and 4a-c), the rubber-elastic segment body is a unitary body comprised of an outer bearing layer, a central compensation area and an inner layer and is cast onto a carrier 18 (see page 12, lines 9-13). It yields radially and not axially.

As set forth by the examiner, Nelson discloses a sheet opening device with transport disc connected to a shaft of the first opening drum provided with an outer elastic support fastened to the disc body of the transport disc with a screw. It cooperates with the securing disc of the second opening drum in order to clamp printed sheets between the outer elastic support and the securing disc for transporting the printed sheets. As pointed out by the examiner, Nelson does not disclose that the outer elastic support has an outer bearing layer, a compensation area, a radial compression area, an inner layer, or a plurality

of stays formed as ledges or lamellas which are positioned at a slant to a radial line.

The examiner applies Koren to show outer elastic supports with an outer bearing layer, a compensation area, a radial compression area, an inner layer, and a plurality of stays for the purpose of controlling the position of sheets by spreading them widthwise. In examiner's view, it would have been obvious to combine the teaching of Koren with the device of Nelson.

It is respectfully submitted that Koren does not show a **unitary** rubber-elastic body comprised of an outer bearing layer, a central compensation area and an inner layer which is cast onto a carrier 18 (see page 12, lines 9-13). Koren shows an inner layer 2 and a central compensation area 4 with a **separate outer layer 3** which has small projections 10 engaging recesses 9 (see Fig. 6) between the segments of the compensation area 4 for a positive-locking engagement between the outer layer 3 and the compensation area 4 enabling axial stretching of the flexible layer 3 when the compensation area 4 is radially compressed and pushed axially outwardly.

Such an axial stretching does not occur and is not desired in the present invention. Note that the segments of Koren are arranged such that they deflect axially upon radial pressure - the segments are slanted in the axial direction. Note that according to the present invention the segments of the rubber-elastic body 32 (see Fig. 2) are arranged to yield in the circumferential direction without being deflected axially, i.e., they yield only radially. The present invention is only concerned with a radial yielding action in order to accommodate sheets of different thickness between two rollers while the cited prior art Koren is designed to stretch sheets axially - compare Fig. 3 showing a wavy sheet 5 and Fig. 4 showing the same sheet 5 stretched and straighten in the axial direction between the stretched outer layers 3.

Therefore, claim 1 is not obvious in view of the cited prior art references and should be allowable together with its dependent claims.

Reconsideration and withdrawal of the rejection of claims 1, 5-7, 12-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. in view of Koren (EP 0 663 363)

and further in view of Tebbe et al. is respectfully requested.

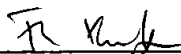
Tebbe et al. has been cited only to show polyurethane as an equivalent to rubber and does not contribute any teaching in regard to a unitary rubber-elastic body that is radially but not axially yielding.

Accordingly, claim 1 is not obvious in view of the cited prior art references and should be allowable together with its dependent claims.

Therefore, in view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Any additional fees or charges required at this time in connection with the application may be charged to Patent and Trademark Office Deposit Account No. 11-1835.

Respectfully submitted,



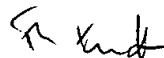
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Dated: March 5, 2002

**Encl.: Amended Claims 1, 6, 8 (clean copy; marked-up version);
amended paragraphs of pages 10, 11 (clean copy and marked-up
version); petition for time extension**

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on March 5, 2002

By: 

Friedrich Kueffner

Date: March 5, 2002

Clean Copy of Amended Claims 1, 6, 8

1. (Amended) A transport disc for an opening device of a printed sheet feeder, the transport disc configured to be arranged on a first opening drum of the opening device, the transport disc comprising:

at least one outer elastic support, wherein the outer elastic support is configured to cooperate with a securing disc of a second opening drum of the opening device to clamp an individual printed sheet between the outer elastic support and the securing disc for transporting the individual printed sheet to a transport device,

wherein the outer elastic support is a unitary rubber-elastic segment body extending in a circumferential direction of the transport disc, and

wherein the unitary rubber-elastic segment body is comprised of an outer bearing layer and a compensation area positioned radially inwardly underneath the outer bearing layer, wherein the compensation area is radially but not axially yielding and supports the outer bearing layer.

6. (Amended) The transport disc according to claim 1,

A2

wherein the rubber-elastic segment body is made of polyurethane.

B

8. (Amended) The transport disc according to claim 1,
further comprising a disc body, wherein the rubber-elastic
segment body is configured to be fixedly connected to the disc
body.

Marked-up Version of Claims 1, 6, 8 to Show Changes Made

1. (Amended) A transport disc for an opening device of a printed sheet feeder, the transport disc configured to be arranged on a first opening drum of the opening device, the transport disc comprising: and having

at least one outer elastic support, wherein the outer elastic support is configured to cooperate with a securing disc of a second opening drum of the opening device to clamp an individual printed sheet between the outer elastic support and the securing disc for transporting the individual printed sheet to a transport device,

wherein the outer elastic support is a unitary rubber-elastic segment body extending in a circumferential direction of the transport disc, and

wherein the unitary rubber-elastic segment body is comprised of ~~has~~ an outer bearing layer and a compensation area positioned radially inwardly underneath the outer bearing layer, wherein the compensation area is radially but not axially yielding and supports the outer bearing layer.

6. (Amended) The transport disc according to claim 1 5,

wherein the rubber-elastic segment body is made of polyurethane.

8. (Amended) The transport disc according to claim 1 5, further comprising a disc body, wherein the rubber-elastic segment body is configured to be fixedly connected to the disc body.

CLEAN COPY OF AMENDED PAGE 10, 2ND PARAGRAPH

Since the printed sheet 1 is opened and transported at a comparatively high velocity, it is important that the printed sheets are geometrically precisely guided when dropping them onto the collecting chain 4. For this purpose, the printed sheets are clamped between the opening drums B and C between at least one securing disc 29 of the opening drum B and a transport disc 14 of the opening drum C. Clamping is realized on circular arc portions 30 and 31 on the circumference of the disc 29 and the transport disc 14, respectively. These surfaces 30 and 31 are preferably cylindrical surfaces.

CLEAN COPY OF AMENDED PAGE 11, 3RD PARAGRAPH

The two supports 16 according to Fig. 2 are connected by screws 17 to a disc-shaped body 15 of the transport disc 14. On the body 15 two clamping rollers 26 are supported between the elastic supports 16 which cooperate respectively with a gripper 3 for gripping an end of the printed sheet 1b in a manner known to a person skilled in the art. The actuation of the two grippers 3 is realized respectively by a shaft 11 on which the grippers 3 are respectively fastened by a screw 13. The shafts 11 are arranged respectively in a bearing 12 on the transport disc 14 and can be rotated by a cam disc (not shown) for actuating the grippers 3 in a manner known to a person skilled in the art.

MARKED-UP VERSION OF PAGE 10, 2ND PARAGRAPH

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